

Please cancel claim 15 without prejudice.

Please amend claim 21 as follows:

21 (Twice Amended). An electronic device comprising:

a system memory circuit including:

a substrate;

a phase-change material over said substrate;

b2 a conductive line of a first conductivity type in said substrate, said line including a more heavily doped region sandwiched between more lightly doped regions, said conductive line providing signals to said phase-change material;

a region of a second conductivity type between said phase-change material and said conductive line;

a pair of trenches on either side of said buried line, said trenches extending through said substrate along said conductive line and said region into the substrate below said conductive line; and

a processor coupled to said system memory circuit.

REMARKS

As amended, the claim now calls for the formation of a trench into the substrate to a depth greater than the depth of the line. This enables the advantageous fabrication technique shown in Figures 2 and 3. In some embodiments, the trenches can not only isolate adjacent word lines from one another, but they also facilitate the manufacture by ion implantation of the regions of different conductivity type and the more lightly and more heavily doped regions.